	Name of work :- Providing Pipe line and construction of chambers to disposal of rain water at Kurlappa layout low laying areas in Kempegowda ward no.1							
No	Description	Unit	L	B	D	Qty	Rate	Amount
	Conducting the level and strip of SURVEY of alignment of Main sewers of required diameter including all data required for generating GIS map of sewer network, preparation and submission of plan and LS with ground level at 30 M intervals and junction points along the centre line of the alignment etc. showing the right of way, any permanent features, culverts, branch sewer pipe etc. complete as per specifications and as directed by the Engineer in charge with all lead and lifts etc. complete for Sewer pipes upto 300 mm dia.::.(BWSSB SR 2017-18,Sl no 123.1,P.no 182)							
		Rmt				863	20	17260
2	Earth work in EXCAVATION FOR PIPELINE TRENCHES 600 mm to 1500 mm trench width by mechanical / manual means as per drawing and technical specifications, including setting out, shoring, strutting, barricading, danger lighting bracing, using sight rails & boning rods at every 100 M wherever necessary as directed, removal of stumps and other deleterious matters, dressing of sides & levelling the bottom of trench to the extent required, utilizing the available excavated earth locally for the work etc. complete IN ORDINARY SOILS / ALL SOILS / HARD SOILS etc. for: Depth up to 2.0 M in all types of soil (BWSSB SR 2017-18,Sl no11.2,P.no55)							
	Up to 2.0m depth for 250mm DWC pipe line							
	Pipe line excavation of Mh-5,6,7&8	Cum	78.15	0.9	1.600	112.54		
	Pipe line excavation of Mh-9,10,11&12	Cum	81.5	0.9	2.1	80.41		
	Pipe line excavation of Mh-13,14 ,15&16	Cum	84	0.9	1.7	128.52		
	Pipe line excavation of Mh-17,18,19 &20	Cum	79.5	0.9	1.7	121.64		
	Pipe line excavation of Mh-14-18-21-22 &23	Cum	111	0.9	1.6	159.84		
	excavation of Mh-28-25-22-30	Cum	83.6	0.9	1.6	120.38		
	excavation of Mh-27-28-29	Cum	60	0.9	1.6	86.40		
	excavation of Mh-24-25-26	Cum	61	0.9	1.6	87.84		
	excavation of Mh-30-31&32	Cum	43.5	0.9	1.6	62.64		
			682.3					
	excavation of MH	Cum	23	(3.142*1.25*1.25)*1.7		225.83		
	Jacking pit at 4 locations	Cum	2X4	1.5	(3.3+0)	19.80		
	RCC Pipe line excavation water lead off	Cum	177.5	2	2	710.00		
						1915.84	269	515360.49
3	Above 2.m -up to 4.0m(BWSSB SR 2017-18,Sl no12.3,P.no55)							
	RCC Pipe line excavation water lead off	Cum	177.5	2	1	355.00	303	107565.00
4	Extra charges for excavation in all classifications in watery situations or foul conditions may be paid duly obtaining approval from the Chief Engineer as under towards DEWATERING with recuperation up to two meter depth and thereof for:(BWSSB SR 2017-18,Sl no15.0,P.no56)excavation & laying of pipe line in Live sanitary line							
	Pipe line excavation of Mh-9,10,11&12	Cum	81.5	0.9	1.3	95.36		
	Pipe line excavation of Mh-13,14 ,15&16	Cum	84	0.9	1.7	128.52		
	Pipe line excavation of Mh-17,18,19 &20	Cum	79.5	0.9	1.7	121.64		

	Pipe line excavation of Mh-14-18-21-22 &23	Cum	111	0.9	1.6	159.84		
	excavation of Mh-28-25-22-30	Cum	83.6	0.9	1.6	120.38		
	excavation of Mh-27-28-29	Cum	60	0.9	1.6	86.40		
	excavation of Mh-24-25-26	Cum	61	0.9	1.6	87.84		
	excavation of Mh-30-31&32	Cum	43.5	0.9	1.6	62.64		
	excavation of MH	Cum	23	(3.142*1.25*1.25)*1.7		191.96		
	RCC Pipe line excavation water lead off	Cum	177.5	2	1	355.00		
						1409.57	61	85983.804
5	Carting of excavated earth of all types up to a distance mentioned below and re-carting back the earth to the same site by vehicle including loading, unloading charges for to & fro, with all lifts, labour, HOM of machinery etc. complete, after obtaining the approval of the Chief Engineer, for: Distance 2 to 3 KM(BWSSB SR 2017-18,Sl no19.3,P.no57)							
	Pipe line excavation of Mh-13,14 ,15&16	Cum	84	0.9	1.700	128.52		
	Pipe line excavation of Mh-17,18,19 &20	Cum	79.5	0.9	1.7	121.64		
	Pipe line excavation of Mh-14-18-21-22 &23	Cum	111	0.9	1.6	159.84		
	excavation of Mh-28-25-22-30	Cum	83.6	0.9	1.6	120.38		
	excavation of Mh-27-28-29	Cum	60	0.9	1.6	86.40		
	excavation of Mh-24-25-26	Cum	61	0.9	1.6	87.84		
	excavation of Mh-30-31&32	Cum	43.5	0.9	1.6	62.64		
	excavation of MH	Cum	23	1.25*1.25)*1.7		225.83		
	Jacking pit at 4 locations	Cum	2X4	1.5	(3.3+0)	19.80		
	RCC Pipe line excavation water lead off	Cum	177.5	2	1	355.00		
						1367.89	287	392584.50
6	KSRB 2.3 : Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications. Specification. No. KBS 2.9 (KPWD SR 2018-19, P no.7 I No.2.10)							
	Total excavation = 2285.84- (Pipe qty+ manhole qty)					2270.838		
	Deduct for							
	250mm Pipe line qty =	683.3*.135*.135*3.142*.27				-39.12		
	Manhole qty =					-191.93		
	RCC pipe line qty	177.55*.25*.25*3.142				-34.86		
						2004.93	201	402990.5783

7	Providing and constructing "wire cut brick manhole chambers" using sulphate resistant cement, conical in shape at top with C.C. 1:3:6 foundation using 40 mm and down size graded metal of approved quality and with an offset of 0.15 m alround the chamber and brick masonry in C.M. 1:4 plaster with wire cut bricks of approved quality and CM plaster 1:3 proportion 12 mm thick inside and outside except for the conical surface outside where the thickness of plaster shall be 20 mm thick, with 1:6 slope in the concrete towards the central drain, finished smooth and fixing of pipes in CC 1:2:4 graded metal of 20 mm and down size including conveying to work spot supplying & fixing SFRC manhole frame and cover confirming to IS:12592 with latest amendments in CC 1:2:4, supplying and fixing of minimum 3 mm thick encapsulated plastic footsteps (as per IS 10910) on 12 mm dia, Grade Fe-415 steel bar (as per IS 1786) staggered at 30 cms apart as detailed in Technical Specifications and as directed, watering, curing, barricading, danger lighting, pouring tar over MH frame and cover, cost of tar, shoring, strutting, dewatering, engraving manhole No. with flow direction on the inner conical surface etc., as per the drawing with wire cut bricks as per technical specifications for the following diameters & depths by using Ordinary Port Land Cement. (inclusive cost of SFRC manhole frame & cover)								
	1.20M Diameter manholes(BWSSB SR 2017-18,Sl no100.11,P.no168)								
8	a) For2.00 m depth	No	20			20	30795	615900
9	a) above 2.0m below3.m (44961-30795	Rmt	3.5			3.5	14166	49581
10	a) For 3.00m depth(BWSSB SR 2017-18,Sl no100.12,P.no168)	No	3			3	44961	134883
11	b)Above 3.0m below 4.0m (59372-44961)	Rmt	0.8				14411	0
12	Installation of steel product pipe by HDD method including preparing and setting up the plant and equipment, preparing new pipe work materials, installing new pipe work and commissioning system or making the system ready for commissioning by HDD operation including all related civil and mechanical works like excavation, shoring / strutting etc. drilling, stringing, ramming and pulling back the new work on the design bore path alignment, proper disposal of drilling fluid and restoration of site after completion etc. for horizontal directional drilling technique suiting Indian conditions in all types of soil including the cost of sleeve /casing pipe etc. in all respects for:(BWSSB SR 2017-18,Sl no4.7,P.no192)								
	For pipes of 400 mm dia and 6 mm thick.								
	At 3 location 20+20+20 meter	Rmt	60			60	13668	820071
13	Supplying DOUBLE WALL CORRUGATED (External annul corrugated & smooth internal wall) (DWC) of class SN 8, piping system in accordance with IS 16098 (Part-2) and conveying to worksite, rolling and lowering into trenches, laying true to line and level and perfect linking at joints, testing and commissioning, including loading and unloading at both destinations and cuts of pipes wherever necessary including jointing with all labour, lead & lifts, including encasing the pipes alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation etc. complete and giving necessary hydraulic test to the required pressure as per ISS (BWSSB SR 2017-18,P no 134, 3.6,M030G)								
	Pipes of SN 8, 250 mm dia.	Rmt	682.8			682.8	1110	757908

L4	Supplying S&S RCC SPUN / VIBRATED CAST PIPES (REINFORCED) pipes NP-3 Class conforming to IS:458-1988 with latest amendments using ordinary portland cement, for sanitary works and conveying to work site, rolling and lowering into trenches, laying true to line and level including loading and unloading at both destinations and jointing of pipes and specials including cost of specials, perfect linking of joints with jack to correct position including cost of jointing materials, i.e, rubber rings conforming to IS: 5382 for S&S RCC pipes, with all leads and lifts as directed and giving necessary hydraulic test as per ISS to the required pressure and commissioning etc. complete. (Contractor will make his own arrangements for procuring water for testing). Before the execution of the work, the contractor shall carry out the survey and will be paid extra for the same as per seperate item.:RCC NP3 Class pipe of 450 mm dia. (BWSSB SR 2017-18,Sl no15.4,P.no158)							
		Rmt	177.5			177.50	2138	379495.0
15	Supplying & fixing of DI Resilient seated soft sealing sluice valve with body, bonnet of ductile Iron of grade GGG50, Wedge fully rubber lined with EPDM & seals of NBR and the valves should be vacuum tight and 100% leak proof with face dimensions as per BS 5163 -89/ IS 14846 -2000 / DIN 3202 F4/ F5. The stem sealing should be with toroldal sealing rings (Minimum 2 "O"-rings). All the valves should be with Electro static power coating both inside and outside with pocket less body passage. The rate is inclusive of cost of valve, T.P.Set, bolts & nuts and rubber insertions, excluding earthwork.(BWSSB SR 2017-18,Sl no100.11,P.no168)							
		No	1			1	184617	184617
								4464199
	Add for GST @ 12%							535703.9
	Miscellaneous and rounding off							96.70
	Total Cost of the Estimate Rs Fifty Lakhs only							**5000000**

Certificate:-

This is to certify that I have personally Visited the site and prepared the estimate in most economical way by adopting prevailing rates as per BWSSB SR 2017-18 & KPWD SR 2018-19

Assistant Engineer
Ward No.1

Assistant Executive Engineer
Yelahanka sub- division

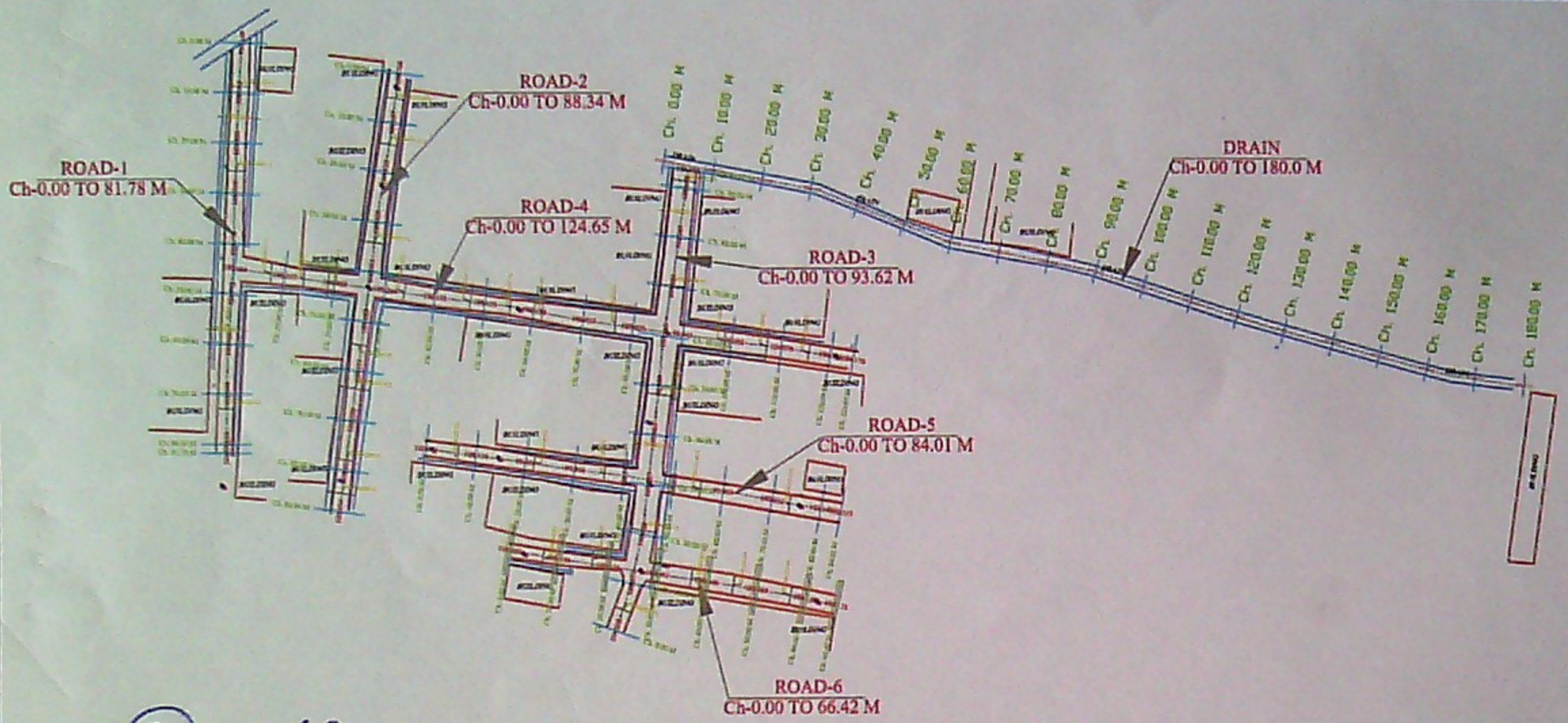
Executive Engineer
Yelahanka Division

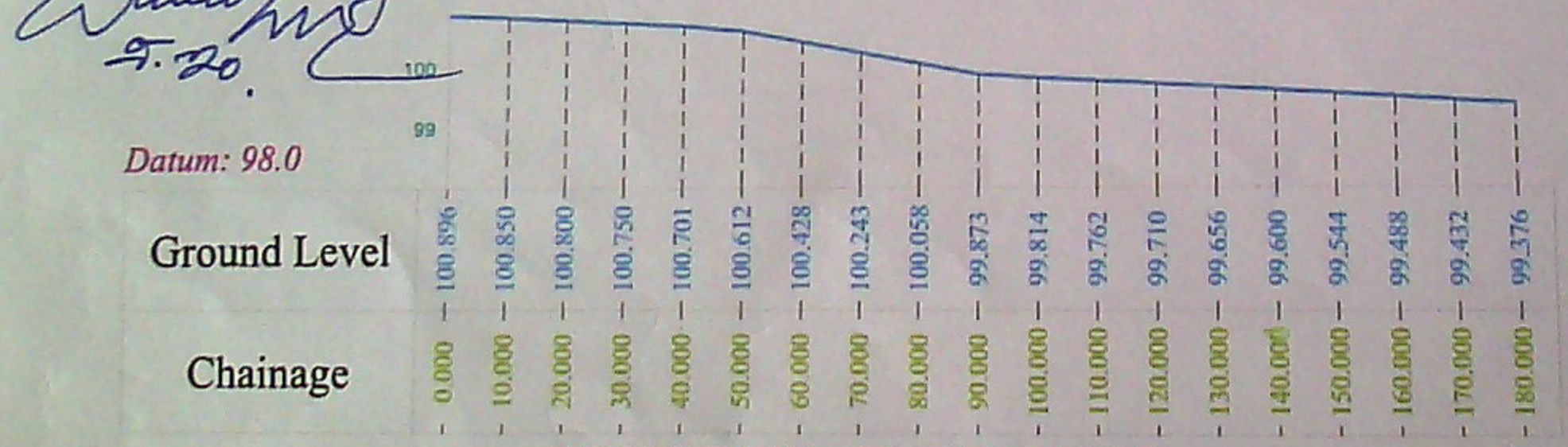
Administrative Sanction for Rs. ....50...00 lakhs
.....fifty lakhs only.....
.....
is accorded under head ..P.3853.....
.....Special development works.....
.....
Registered as CE No. ..... Subject to conditions contained in enclosed memo No BE/YNK/AS1/76/2020-21 Dr. 17.11.2020

Executive Engineer

Technical Sanction
Accorded For Rs 50 w lakhs only
Head of A/C P3853
CER NO 140A Dt. 17.11.2020

CE (YNK)





LONGITUDINAL SECTION OF DRAIN



Scale: 1:100 OR 1cm=1.0m

NOTE:-

1. ALL DIMENSIONS AREA IN METERS.

Total Length Of Road Is 6[illegible].0Mtrs

Total Length Of Drain Is 180.00Mtrs

CLIENT:

Mr. PRABAHAKAR

PROJECT:

ROAD SURVEY AT
SHANKRAPPA LAYOUT,
MARUTHI NAGAR, YELAHANKA,
BENGALURU.

SHEET: 1 OF 1 | S C A L E | 30m 20 10 0 30m | 1:100 OR 1cm=1.0m

UNIVERSAL SURVEYS & CONSULTANTS

D:// BHARAT/2020/SEP/C-1800.2 HOODLU CROSS(YELAHANKA)-ROAD

Asst. Executive Engineer
BBMP
Yelahanka Sub Division